

4 Results

4.1 Stakeholders, Needs & Issues By County

This section of the document contains the results from the information-gathering process within each county. **Important Note:** In many of the meetings held in individual counties, there were issues brought up which are not consortium issues, or issues that can or should be addressed at the consortium level. These concerns have all been documented in the meeting minutes from those meetings (which all appear in an appendix to this document), but they may not be repeated or documented in this section. The concentration in this document was on items relevant to and addressable by the consortium.

Appendix D – Radio Inventory Summary contains a detailed listing of the radio inventories of those agencies who answered questionnaires. If questionnaires were not answered, there may not be an entry for those agencies. The one notable exception is Fallon County, where Chuck Lee sent the Project Manager a good deal of information about radios in that county.

4.1.11 Prairie County

County Representative: John Pisk, County DES Coordinator. 406-635-5738

Number Of County Stakeholder Questionnaires Returned: 5

Number Of County Agencies Represented By Questionnaires: 5

Number of Sites In County:

4.1.11.1 County Stakeholder Interactions

The following matrix details the major stakeholders in the county and how they interact with each other.

Prairie County	Prairie County Ambulance	Baker Dispatch (9-1-1 co-op)	Prairie County Sheriff's Office	Terry VFD	Dawson Co. Sheriff's Office/Dispatch	Miles City Fire Dept./Dispatch	Cabin Creek Fire District	Prairie County Fire Dept.	BLM	DNRC	Dawson Rural/W. Glendive Fire	Glendive Fire Dept.	Prairie County Road Dept.	Prairie County Rural Fire	Forest Service	FBI	MDOT	Montana Highway Patrol	FMP	Montana Army National Guard	Prairie Community Health Center	Terry Public Schools	Fallon VFD	MT Dept. of Livestock	BNSF Railway	Montana Dakota Utilities	Prairie County DES	Prairie County Coroner	Tongue River Electric Coop	Garfield County, MT	McCone County, MT	Dawson County, MT	Wibaux County, MT	Fallon County, MT	Custer County, MT	Prairie County Fire Warden	TAB Electronics	East-Mont Communications	
Prairie County Ambulance																																							
Baker Dispatch (9-1-1 co-op)	B																																						
Prairie County Sheriff's Office	B	E																																					
Terry VFD	B	B	B																																				
Dawson Co. Sheriff's Office/Dispatch	E	E	E	E																																			
Miles City Fire Dept./Dispatch	E	E	E	E	E																																		
Cabin Creek Fire District	E	B	E	E	E	E																																	
Prairie County Fire Dept.	E	E	E	E	E	E	E																																
BLM	E	E	E	E	E	E	E	E																															
DNRC	E	E	E	E	E	E	E	E	E																														
Dawson Rural/W. Glendive Fire	E	E	E	E	E	E	E	E	E	E																													
Glendive Fire Dept.	E	E	E	E	E	E	E	E	E	E	E																												
Prairie County Road Dept.	E	B	B	E	E	E	E	E	E	E	E	E																											
Prairie County Rural Fire	E	B	B	E	E	E	E	E	E	E	E	E	E																										
Forest Service	E	E	E	E	E	E	E	E	E	E	E	E	E	E																									
FBI	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E																								
MDOT	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E																							
Montana Highway Patrol	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E																						
FMP	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E																					
Montana Army National Guard	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E																				
Prairie Community Health Center	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E																			
Terry Public Schools	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E																		
Fallon VFD	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E																	
MT Dept. of Livestock	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E																
BNSF Railway	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E															
Montana Dakota Utilities	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E														
Prairie County DES	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E													
Prairie County Coroner	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E												
Tongue River Electric Coop	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E											
Garfield County, MT	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E										
McCone County, MT	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E									
Dawson County, MT	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E								
Wibaux County, MT	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E							
Fallon County, MT	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E						
Custer County, MT	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E					
Prairie County Fire Warden	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E			
TAB Electronics	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E		
East-Mont Communications	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	

Figure 28 – Communication Interactions, Prairie County



4.1.11.2 Questionnaire Results

Prairie County Ambulance

Date of Interview or Survey Completion:

Not answered.

Location of Agency:

*217 West Park Street
Terry Montana*

Person Present And Agencies/Entities Represented:

John Pisk – Prairie County Ambulance

Questions

1. Number of Channels? Simplex or Duplex?

*16-120 Depending on the age of the unit.
Combined Simplex and Duplex.*

2. List the frequencies your agency currently uses and how each is used.

*155.625 Rx; 158.850 Tx
Prairie South (repeater) – paging channel and communicate with dispatch (Fallon county, Baker Montana)
Prairie direct – paging/dispatch 155.625, 155.625
Gold – mobile to mobile/portable (mutual aid) – 153.905
Silver – 155.790
White – 155.280; hospital encoding mobile EMS to mobile EMS
Tan – 155.340
Pink – 155.385
Terry Fire – City fire ops
Red – County fire ops – 154.070
Brown – 155.820
Purple – 155.220*

3. Coverage

A. Approximately what percentage of your jurisdictional area is adequately covered?

80%

B. How acceptable is that coverage?

80% acceptable.

C. If unacceptable, why (Severe terrain, Gaps, Antenna Patterns, In-building Problems, etc.)?

Terrain, inadequate equipment such as repeaters, mobiles and portables, in building problems with steel siding and tin roofs.

D. If acceptable, would an improvement still be desired? Why?

Not answered.

E. Do you have mobile-to-mobile coverage countywide? If not, do you need it?

No. Yes we do need it. We need to update the south repeater and mobile radius to do this we also need increased coverage with portables.

4. Current Loading

A. Number of Mobile Units:

2

B. Number of Portable Unit:

10

5. Any units currently P25 capable/enabled? Which ones?

3

6. Dispatch

A. How is dispatch conducted?

We belong to the Fallon, Prairie, Carter and Wibaux 911 co-op. All 911 lines are answered in Baker (Fallon County). They then dispatch us. The base fire, EMS, Law, and hospital.

B. From where?

Baker MT.

C. Hardware Used?

Not answered.

D. Number of Positions?

Not answered.

E. Adequate? If not, why? How could it be improved?

Not answered.

7. Sharing of System

A. Is your system currently being shared?

Yes.

B. Which parts and with whom?

All agencies: Terry fire, Prairie fire, Fallon fire, Prairie County Ambulance, Prairie county sheriff are all passed on Prairie County direct and/or Prairie County South, frequencies attached.

8. What is good about your current system?

Our 911 Center and the service they provide us is good as anything else in the State. They may have equipment needs we don't know about, but they can assess that. Paging all response agencies has greatly improved.

9. What are the issues, problems, or challenges with your current system not already covered above?

*We need updated equipment mobility and portability.
We need more and/or more capable repeater/base stations so we can talk to dispatch and units either on a repeated or non-repeated channel without having to compete with congestion from other agencies.
We need a more uniform radio system so each mobile and each portable is the same model brand and works the same way to eliminate operator confusion.
We need new alert pagers.*

10. What other agencies do you need to communicate with?

A. On a day-to-day (administrative) basis:

*Dispatch
Prairie County Sheriff's office
Terry Fire*

B. On an emergency basis:

*Dawson County Sheriff dispatch
Miles City Dispatch/fire*

11. Please describe your radio communications during typical day-to-day (administrative) activities and during emergencies.

Receive page alerts, responders acknowledge pages, check in with portable units when coverage allows. If they don't have radio coverage they either notify dispatch by L.L. or just respond. We primarily communicate with local agencies or dispatch. Most of our communication is on direct. The repeater is adequate and we have to switch it to when we are out of range of the base station.

12. List, in priority order, up to five (5) communications improvements needed from initial dispatch to call completion.

These are listed 1-5m but are all equally important and need to be done at the same time.

- 1. New alert pagers*
- 2. New and uniform portable radios with digital and encryption capabilities.*
- 3. New and uniform mobile radios so each unit is the same to eliminate operator confusion.*
- 4. Replace the south repeater with P25 repeater.*
- 5. Add additional repeater sites to increase coverage. It is necessary to talk to dispatch encrypted and on a channel that may not be repeated so we don't have to compete with other agencies.*

13. List, in priority order, up to five (5) factors that will be critical to future radio system in your county, city, or area of jurisdiction.

- 1. A redundant/reliable system of repeaters and base stations that will allow for communications with dispatch from 90% of the county with several channel options but not dependent on/or including a repeated channel.*
- 2. A system that provides uniform radios to eliminate operator confusion, but is affordable.*
- 3.*
- 4.*



5.

- 14. Please use this space to add any items or comments which you would like to make that have not been covered above.**

Radio operations education for individual agencies so the system as a whole runs smooth.



Prairie Co. Rural Fire

Date of Interview or Survey Completion:

05/03/2005

Location of Agency:

Terry, MT

Person Present And Agencies/Entities Represented:

William Klunder

Questions

1. Number of Channels? Simplex or Duplex?

Not answered.

2. List the frequencies your agency currently uses and how each is used.

*Prairie County South
P.C. Talk Around
P.C. North
Mutual Aids*

3. Coverage

A. Approximately what percentage of your jurisdictional area is adequately covered?

80%

B. How acceptable is that coverage?

Good

C. If unacceptable, why (Severe terrain, Gaps, Antenna Patterns, In-building Problems, etc.)?

Severe terrain, gaps



D. If acceptable, would an improvement still be desired? Why?

Working on repeater site

E. Do you have mobile-to-mobile coverage countywide? If not, do you need it?

No, yes.

4. Current Loading

A. Number of Mobile Units:

11

B. Number of Portable Unit:

6

5. Any units currently P25 capable/enabled? Which ones?

4 Portable units

6. Dispatch

A. How is dispatch conducted?

With Fallon County.

B. From where?

Baker, MT

C. Hardware Used?

?

D. Number of Positions?

?

E. Adequate? If not, why? How could it be improved?

Yes.



7. Sharing of System

A. Is your system currently being shared?

Law and Fire.

B. Which parts and with whom?

Sheriff and rural fire

Fallon Fire

Cabin creek fire

8. What is good about your current system?

Everything except lack of coverage and some aging units.

9. What are the issues, problems, or challenges with your current system not already covered above?

Aging equipment and not P25 compatible.

10. What other agencies do you need to communicate with?

A. On a day-to-day (administrative) basis:

Custer, Dawson, McCone counties.

B. On an emergency basis:

Fallon, Wibaux, Garfield

11. Please describe your radio communications during typical day-to-day (administrative) activities and during emergencies.

Not answered.

12. List, in priority order, up to five (5) communications improvements needed from initial dispatch to call completion.

- 1. County wide mobile-mobile*
- 2. Update radios and repeaters*
- 3. Encryption*
- 4. More repeaters*
- 5. P25 radios*



13. List, in priority order, up to five (5) factors that will be critical to future radio system in your county, city, or area of jurisdiction.

1. *Affordability*
2. *Simplicity*
3. *Reliability*
- 4.
- 5.

14. Please use this space to add any items or comments which you would like to make that have not been covered above.

Not answered.



Prairie County Road Department

Date of Interview or Survey Completion:

05/11/2005

Location of Agency:

*Box 568
Hogland Street
Terry, MT 59349*

Person Present And Agencies/Entities Represented:

Not answered.

Questions

1. Number of Channels? Simplex or Duplex?

*2 Duplex
70 Simplex*

2. List the frequencies your agency currently uses and how each is used.

*1 – Prairie County road
2 – Direct (road)
3 – Prairie County S.O. 155.625 rx, 158.850 tx
4 – Gold 153.905
5 – State Land fire 151.475 tx rx
6 – White EMS 155.280
7 – Custer County road
8 – MHP
9 – MHP
10 - Weather*

3. Coverage

A. Approximately what percentage of your jurisdictional area is adequately covered?

70-80%

B. How acceptable is that coverage?

Unacceptable.

C. If unacceptable, why (Severe terrain, Gaps, Antenna Patterns, In-building Problems, etc.)?

Terrain

D. If acceptable, would an improvement still be desired? Why?

N/A

E. Do you have mobile-to-mobile coverage countywide? If not, do you need it?

No.

4. Current Loading

A. Number of Mobile Units:

*6 Maxon with 10 channel
5 with 1 channel*

B. Number of Portable Unit:

0

5. Any units currently P25 capable/enabled? Which ones?

0

6. Dispatch

A. How is dispatch conducted?

Prairie County dispatch in Baker when needed.

B. From where?

Not answered.

C. Hardware Used?

Not answered.

D. Number of Positions?

Not answered.

E. Adequate? If not, why? How could it be improved?

Not answered.

7. Sharing of System**A. Is your system currently being shared?**

Yes.

B. Which parts and with whom?

Not answered.

8. What is good about your current system?

Very little.

9. What are the issues, problems, or challenges with your current system not already covered above?

Need more repeater sites – Sheep Mtn.

Better communications for fire departments.

Better communications for snow plowing winter hazards. Endangers employees due to desolate areas with no coverage.

Need more radios with multiple channels.

Incorporate with BLM, State Fire, DNRC.

10. What other agencies do you need to communicate with?**A. On a day-to-day (administrative) basis:**

Between department employees

2 sheriff officers.

B. On an emergency basis:

?

11. Please describe your radio communications during typical day-to-day (administrative) activities and during emergencies.

*Communicate between road foreman and employees to give instructions/orders.
Communicate with Prairie County sheriff office (Terry) and Baker.*

12. List, in priority order, up to five (5) communications improvements needed from initial dispatch to call completion.

1. *Repeater coverage, radio coverage, Sheep Mtn location. Be able to talk to dispatch without a repeated channel. Several channel options to talk to dispatch.*
2. *More mobile radios for vehicles.*
3. *Base station at county road shop.*
4. *Portable radios with repeater system rather than mobiles fixed in vehicle which receive more abuse.*
- 5.

13. List, in priority order, up to five (5) factors that will be critical to future radio system in your county, city, or area of jurisdiction.

1. *Affordable*
2. *Reliable*
3. *Simple to operate*
4. *Durable*
- 5.

14. Please use this space to add any items or comments which you would like to make that have not been covered above.

Not answered.



Terry Volunteer Fire Dept.

Date of Interview or Survey Completion:

Not answered.

Location of Agency:

Terry, MT

Person Present And Agencies/Entities Represented:

Not answered.

Questions

1. Number of Channels? Simplex or Duplex?

Not answered.

2. List the frequencies your agency currently uses and how each is used.

154.280 ? Terry Vol Fire

Mutual Aid:

Red, Yellow, Scarlet, Ruby, Gold

3. Coverage

A. Approximately what percentage of your jurisdictional area is adequately covered?

99%

B. How acceptable is that coverage?

Good

C. If unacceptable, why (Severe terrain, Gaps, Antenna Patterns, In-building Problems, etc.)?

In building.

D. If acceptable, would an improvement still be desired? Why?

Yes, Yes.



E. Do you have mobile-to-mobile coverage countywide? If not, do you need it?

No.

4. Current Loading

A. Number of Mobile Units:

6

B. Number of Portable Unit:

10

5. Any units currently P25 capable/enabled? Which ones?

14

6. Dispatch

A. How is dispatch conducted?

911 answered in Baker, paged.

B. From where?

Baker.

C. Hardware Used?

Mobile Bendix King Radios and hand-held

D. Number of Positions?

Not answered.

E. Adequate? If not, why? How could it be improved?

Not answered.

7. Sharing of System

A. Is your system currently being shared?

Yes.

B. Which parts and with whom?

Dispatch County sheriff

8. What is good about your current system?

Everybody can talk to everybody statewide now. In rural Montana this is paramount.

9. What are the issues, problems, or challenges with your current system not already covered above?

There is poor redundancy for our dispatch at the present. The Terry Vol Fire would like a county-wide fire repeater set up. A base set up and tower at fire hall to handle or dispatch fire equipment separate of Baker dispatch to clear up law enforcement frequency and dispatcher.

10. What other agencies do you need to communicate with?

A. On a day-to-day (administrative) basis:

Now – county sheriff

B. On an emergency basis:

BLM, DNRC, Miles City Fire Rescue, both Glendive depts.

11. Please describe your radio communications during typical day-to-day (administrative) activities and during emergencies.

Not answered.

12. List, in priority order, up to five (5) communications improvements needed from initial dispatch to call completion.

- 1. Dispatch center at fire hall/EOC.*
- 2. Ability to page firemen with in our county from our dispatch*
- 3. Ability to control siren functions from Terry.*
- 4. Ability to talk county-wide from fire hall*
- 5.*

Encryption is “bull” for fire departments.



13. List, in priority order, up to five (5) factors that will be critical to future radio system in your county, city, or area of jurisdiction.

- 1. Repeater system at fire hall (independent of county courthouse). Independence.*
- 2. Narrow band radios or up graded Kings. Greater functionality.*
- 3. County wide fire repeater system to work with Bendix Kings. Reliability.*
- 4.*
- 5.*

14. Please use this space to add any items or comments which you would like to make that have not been covered above.

Not answered.



Cabin Creek Fire

Date of Interview or Survey Completion:

Not answered.

Location of Agency:

Eastern Prairie County, Montana.

Person Present And Agencies/Entities Represented:

Not answered.

Questions

1. Number of Channels? Simplex or Duplex?

16 Channels – Radio - 1

2. List the frequencies your agency currently uses and how each is used.

Minitor III 1 Freq VIB, VHP – Radio – 1

Minitor III 1 Freq – 151.000 – 3 pagers

3. Coverage

A. Approximately what percentage of your jurisdictional area is adequately covered?

80% using the south repeater.

B. How acceptable is that coverage?

Not answered.

C. If unacceptable, why (Severe terrain, Gaps, Antenna Patterns, In-building Problems, etc.)?

Terrain, gaps, in-building (metal siding).

D. If acceptable, would an improvement still be desired? Why?

Not answered.

E. Do you have mobile-to-mobile coverage countywide? If not, do you need it?

No, yes.

4. Current Loading**A. Number of Mobile Units:**

1 (doesn't work)

B. Number of Portable Unit:

1

5. Any units currently P25 capable/enabled? Which ones?

0

6. Dispatch**A. How is dispatch conducted?**

Paged through Baker, MT.

B. From where?

Baker, MT.

C. Hardware Used?

Not answered.

D. Number of Positions?

Not answered.

E. Adequate? If not, why? How could it be improved?

Not answered.

7. Sharing of System**A. Is your system currently being shared?**

Yes.

B. Which parts and with whom?

Page to 3 pagers and 1 portable radio.

8. What is good about your current system?

The response is better then before radio and pagers.

9. What are the issues, problems, or challenges with your current system not already covered above?

The one mobile we have is not working. With the one radio we can respond or call the county fire people but cannot talk to the other members of the district with the one portable radio. Also the fire truck does not have a radio. Could use 2 more portable radios and 2 mobile radios for the trucks.

Need more portables.

Need mobiles.

10. What other agencies do you need to communicate with?

A. On a day-to-day (administrative) basis:

Dispatch and local agencies (county).

B. On an emergency basis:

Prairie County Sheriff's office.

Prairie County Fire depts..

Cabin Creek Fire district.

11. Please describe your radio communications during typical day-to-day (administrative) activities and during emergencies.

Not answered.

12. List, in priority order, up to five (5) communications improvements needed from initial dispatch to call completion.

1. *County wide mobile to mobile coverage.*

2. *Need more alert pagers*

3. *Need more portables*



4. *Need mobiles*
5. *Need a more comprehensive coverage pattern by adding repeater sites.*

13. List, in priority order, up to five (5) factors that will be critical to future radio system in your county, city, or area of jurisdiction.

- 1.
- 2.
- 3.
- 4.
- 5.

14. Please use this space to add any items or comments which you would like to make that have not been covered above.

Not answered.

4.1.11.3 County Concerns or Issues

1. Communications Improvements

The following pie chart depicts the communications improvements desired by the responding stakeholders in this county:

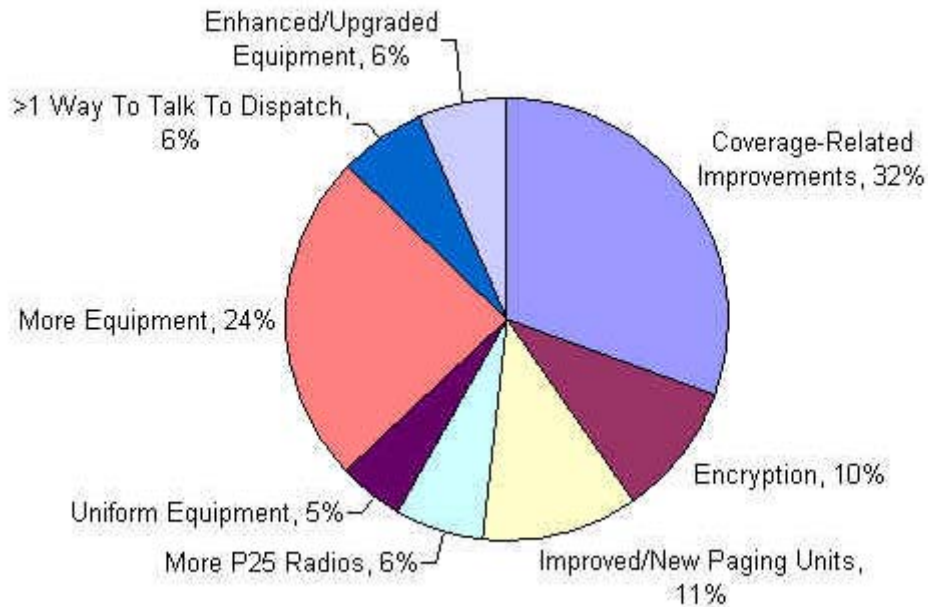


Figure 29 – Communications Improvements, Prairie County

How to read this chart:

Stakeholders were asked to list, in priority order, the top five communications improvements they would like to see. Those items ranked higher were given a higher point value than those ranked lower. A percentage was then calculated. If the chart contains less than five “wedges,” this means the stakeholders did not list the full five possible items.

2. Success Factors

The following chart depicts the success factors considered critical by the responding stakeholders in this county in order for the Eastern Tier radio project to be successful.

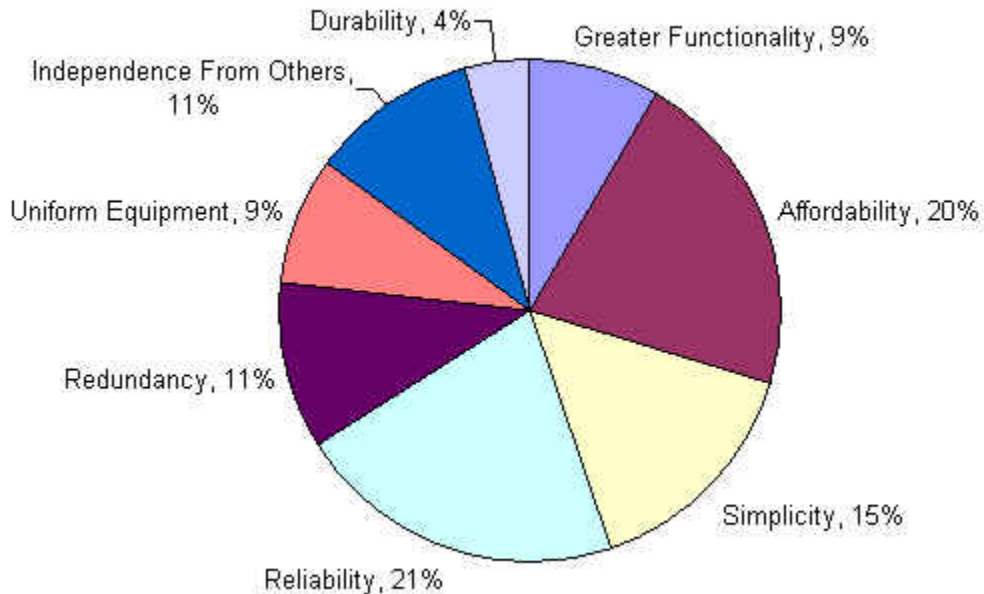


Figure 30 – Critical Success Factors, Prairie County

How to read this chart:

Stakeholders were asked to list, in priority order, the top five factors they felt were most necessary for the Eastern Tier radio project to be successful. Those items ranked higher were given a higher point value than those ranked lower, in order to give higher-ranked items more weight. A percentage for each item was then calculated. If the chart contains less than five items (“wedges”), this indicates the stakeholders did not list the full five possible items.

Some of the same items often appear in both the communications improvements chart and the critical success factors chart. This indicates that these items are very important to the stakeholders.

3. Major Dead Spots

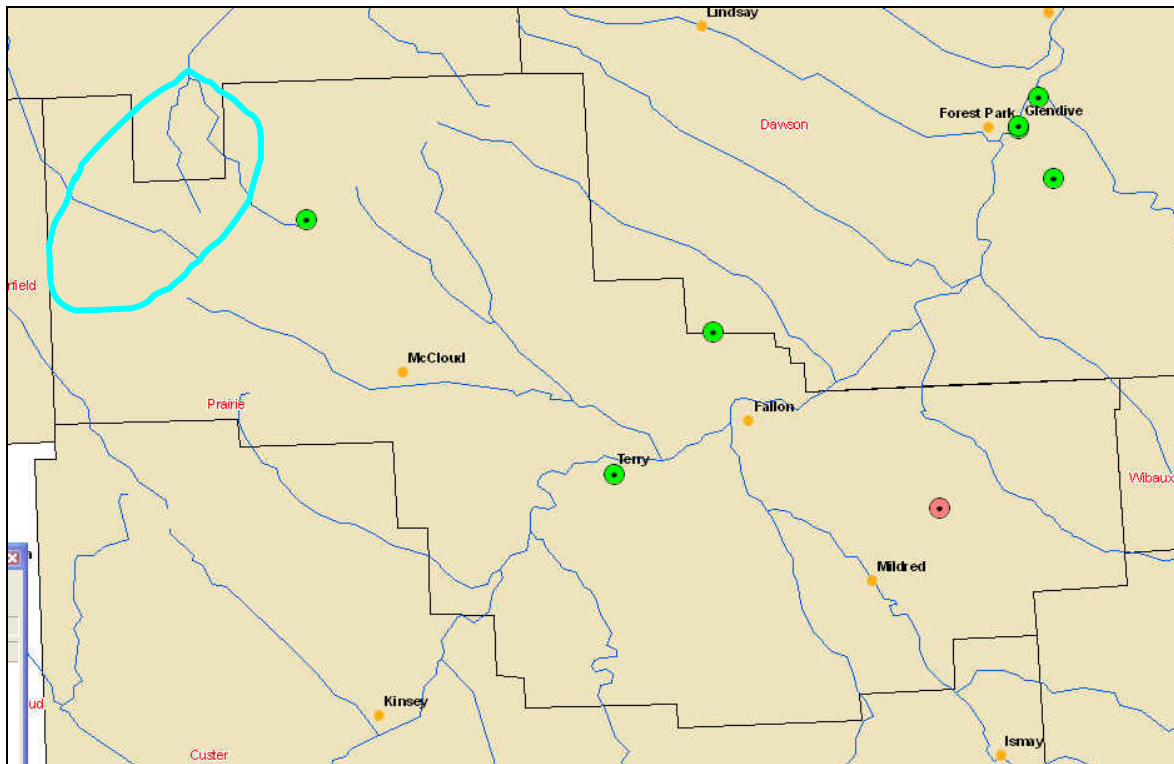


Figure 31 – Dead Spots, Prairie County

The road crews experience a problem in the northwestern portion of the county. The Sheep Mt. repeater, however, should help the road crews. Other than that, no specific major dead spots were identified. Severe terrain seems to be the biggest problem.

Note: Location of “dead spots” is very approximate. In addition, some areas within the dead spots will have better reception than others.

4. Uniform Equipment

Uniform equipment has been stated as a desirable thing in Prairie County. There are a large number of people who don’t use their radio often enough to remember effectively how to use them.